

### **REMARKS/ARGUMENTS**

Claims 1-67 remain in this application. No claims have been canceled. Claims 1, 2, 5-7, 36-38, 40, 42, 44, 46, and 48 have been amended. Claims 62-67 have been added.

Regarding the amended claims, claims 1, 2, and 36 (R and/or R' are alkyl groups having "at least three carbon atoms") have been amended based on the descriptions, such as provided at page 5, lines 8-15 and original claim 8 of the instant specification. Additionally, the chemical structure in claim 1 has been amended such "S" (sulfur) has been interposed for the moiety designated arbitrarily as "X" in the structure as it appeared in the original claim. "S" was the defined species for "X" in the original specification, including the original claims. This amendment merely simplifies the recitation of the chemical structure. A similar change in the same chemical structure appears in new claims 63, 64, 65, and 67. Claims 5-7 have been editorially amended. Claims 37 and claim 38 (R and R' independently are alkyl groups having "four to twenty-two" or "four to six" carbon atoms, respectively) have been amended based on the descriptions, such as provided at page 5, lines 8-15 and original claims 9 and 65 of the instant specification. Claims 40, 42, 44, 46, 47, and 48 have a minor typographical correction made therein.

New claim 62 is based on the descriptions, such as provided at page 5, lines 8-15 and original claim 1 of the instant specification. New claim 63 combines the recitations of original dependent claims 3 and 4 as rewritten in independent form including all of the limitations of the original base claim. New claim 64 sets forth the recitations of original dependent claim 7 as rewritten in independent form including all of the limitations of the original base claim and intervening claim. No new matter has been introduced. New claim 65 sets forth the recitations of original dependent claim 8 as rewritten in independent form including all of the limitations of the original base claim. New claim 66 is based on original claim 9. New claim 67 sets forth the recitations of original dependent claim 26 as rewritten in independent form including all of the limitations of the original base claim.

**Response to Indefiniteness Rejection**

Claim 36 has been rejected under 35 U.S.C. 112, second paragraph for indefiniteness as groups R and R' in the recited chemical structure inadvertently were not defined in the claim.

Adopting the Examiner's suggestion, Applicant has amended claim 36 to identify groups R and R' of the chemical structure according to their description as set forth in original dependent claim 37. Therefore, it is believed that this rejection has been obviated, and, accordingly, it should be withdrawn.

**Response to Anticipation Rejection Based on Univ. Picardie and Len et al.**

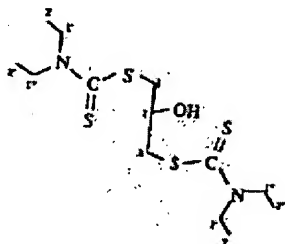
Claims 36-38 have been rejected under 35 U.S.C. §102(b) as being anticipated by Univ. Picardie (French Patent 2,735,130A) and Len et al. (the article "Synthesis and Antifungal Activity of Novel Bis(dithiocarbamate) Derivatives of Glycerol).

Applicant points out that original claim 37, the recitations of which are now recited in its amended parent claim 36, recited R and R' are independently selected from alkyl groups having at least three carbon atoms. Claim 37, as currently amended, recites R and R' are independently selected from C<sub>4</sub> to C<sub>22</sub> alkyl groups, while claim 38, as currently amended and now depending from claim 36, recites R and R' are independently selected from C<sub>4</sub> to C<sub>6</sub> alkyl groups.

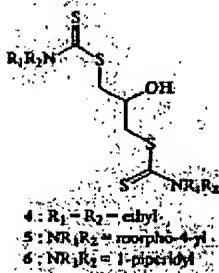
Applicant has reviewed the Univ. Picardie publication including the compound set forth on page 23 thereof, as well as the product compound of scheme 1 shown in the Len et al. publication, both of which were specifically referenced in the Office Action.

The chemical structures of those particular referenced compounds as shown in Univ. Picardie and Len et al. are reproduced below:

Univ. Picardie  
 (French 2735130)  
 Page 23



Len et al.  
 From Scheme 1  
 Page 2856



The Univ. Picardie publication identifies the above compound on page 23 thereof as "1,3-di-S-(N,N-diethylthiocarbamoyl)-1,3-di-désoxy-DL-glycérol" (Applicant's underlining added for emphasis). The Len et al publication identifies the above compound on page 2856 thereof as "Bis-1,3-S-(N,N-diethylthiocarbamoyl)-1,3-dideoxyglycerol" (Applicant's underlining added for emphasis). The Univ. Picardie and Len et al. publications ostensibly are describing the same chemical structure.

As apparent from these chemical structures and corresponding chemical names described in Univ. Picardie and the Len et al. publication, those referenced compounds only have ethyl groups at the R and R' positions of the presently claimed compound. Neither the Univ. Picardie nor the Len et al. reference suggests any other group at those positions other than "ethyl."

Therefore, neither the Univ. Picardie nor the Len et al. reference anticipates the composition having a chemical compound as presently recited in present independent claim 1 and claim 36, and, accordingly, this rejection should be withdrawn. Claims 37 and 38, which depend from above-discussed claim 36, are even further separated and differentiated from Univ. Picardie and Len et al. in that they recite R and R' are alkyl groups which are  $\underline{C}_4$  to  $C_{22}$ , or  $\underline{C}_4$  to  $C_6$ , respectively.

In addition, Applicant notes that original claim 8 (reciting R and R' are independently selected from alkyl groups having "three to eight carbon atoms") and original claim 9 (R and R' are alkyl groups having "four to six carbon atoms") have been indicated elsewhere in the Office Action (p. 4) as being objected to for depending on a rejected base claim, but would be allowable

if rewritten in independent form. Applicant submits that the reasons for allowance applicable to original claims 8 and 9 should be taken into account in determining the patentability of amended claims 36-38.

**Response to Anticipation Rejection Based on Kubota**

Claim 36 also has been rejected under 35 U.S.C. §102(b) as being anticipated by Univ. Kubota (Database accession no. 88:74354 (XP 002228723)).

The Office Action has referenced the compound set forth on page 2, marker 45, in Kubota.

Applicant points out that the Kubota publication illustrates a chemical structure and defines the structure of marker 45 as "Carbamodithioic acid, dimethyl-, 2-hydroxy-1,3-propanediyl ester" (Applicant's underlining added for emphasis). As such, the compound described by Kubota is even further separated and different than the compound recited in instant claim 36, as amended, reciting R and R' are independently selected from alkyl groups having at least three carbon atoms.

Therefore, the Kubota reference does not anticipate the composition having a chemical compound as presently recited in present independent claim 36, and, accordingly, this rejection should be withdrawn.

**Response to Obviousness Rejection Based On Latyuk et al. and Smalheer et al.**

Claims 1, 2, 5, 6, 14-25, 27, 28, and 49-61 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Latyuk et al. (Database accession no. 137:127291 (XP 002228722)). Applicant respectfully traverses for at least the following reasons.

In the Office Action, the Examiner is understood to take the position that Latyuk et al. ("Latyuk") discloses "nitrogen derivatives of 1-alkylthio-3-R'-propanol-2 as set forth on pages 3-9 (markers 20-26)", which is urged to be relevant to the compounds recited in original claims 1, 2, 5 and 6. The Smalheer et al. reference was understood to be relied upon in the Office Action merely for the position taken therein that certain additional additives recited in some original

dependent claims other than claim 1 (e.g., claims 14-17, and particularly the specific antioxidants of original dependent claim 17), which were not described by Latyuk, are known lubricant additives that may be used in combination in one lubricant composition for their known imparted properties. The Office Action also urged that the presently recited different types of oils and methods of oil or lubricant usage in which the composition of claim 1 could be used (e.g., see claims 18-25 and 49-61) "may all be comprised of base lubricating oils which is clearly taught in the prior art."

Applicant notes that the compounds corresponding to markers 20-26 as described in Latyuk all require a "diethyl-" structure on the dithiocarbamoyl portion of the compound. Therefore, those referenced compounds of Latyuk only would have ethyl groups at the R and R' positions of the presently claimed compound. The Latyuk reference nowhere suggests any other group at those positions other than "ethyl."

Present claim 1, as amended, recites that "... at least one of R or R' is an alkyl group having at least three carbon atoms." Latyuk does not teach or suggest that recitation. Present claim 2, as amended, recites that R and R' are independently selected from alkyl groups having at least three carbon atoms. Therefore, Latyuk is even further separated and differentiated by present claim 2, as amended.

Moreover, the secondary reference to Smalheer fails to compensate for these deficiencies and shortcomings of the primary reference relative to the presently recited R and R' groups of the compound of the composition as recited in present claim 1, as amended. Whatever relevance Smalheer may (or may not) have with respect to the additional lubricant ingredients, such as recited in instant claims 14-25, 27, 28, and 49-61, the reference fails to describe or suggest the compound as recited in instant claim 1. The relied upon prior art fails to teach all the presently claimed recitations of the composition of present claim 1, much less suggest a combination of all of them.

In view of at least the above, Applicant submits that no *prima facie* case of obviousness has been established against the instant claims based on the combination of Latyuk and Smalheer et al., and, accordingly, this rejection should be withdrawn.

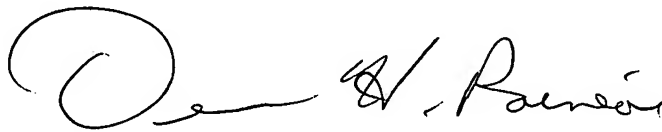
Appln. No. 10/062,161  
Amendment dated July 30, 2004  
Reply to Office Action of May 28, 2004

Applicant notes with appreciation the early determination and indication of allowable subject matter at page 4 of the Office Action, relative to claims 3, 4, 7-13, 26, 29-35 and 39-48.

In view of the above, Applicant respectfully requests reconsideration and withdrawal of the rejections. Applicant requests that a timely Notice of Allowance be issued in this case.

If the Examiner believes that a teleconference would be useful in expediting the prosecution of this application, the official is kindly invited to contact Applicant's undersigned representative of record.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Dennis H. Rainear", with a large, stylized initial "D" and a flourish at the end.

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Date: **July 30, 2004**